What is claimed is:

1. A method for decoding a signal, comprising:

determining prior probabilities associated with an encoded input signal;

performing iterative decoding on said encoded input signal, using said prior probabilities, to estimate a codeword associated with said encoded input signal, said codeword being within a base cell of an underlying lattice; and

determining a cell translation associated with said encoded input signal based on said codeword.

2. The method of claim 1, further comprising:

mapping said codeword to an appropriate cell of said underlying lattice using said cell translation.

3. The method of claim 1, wherein:

said encoded input signal is coded with a multilevel coset code.

4. The method of claim 1, wherein:

said encoded input signal is coded with a lattice code.

5. The method of claim 1, wherein:

said encoded input signal is coded with a code having at least one constituent code; and

determining prior probabilities includes determining a probability that a first coordinate of a first constituent code has a predetermined value, based on said encoded input signal.

6. The method of claim 1, wherein:

said encoded input signal has been modified by an interferer; and

determining prior probabilities includes determining probabilities based upon statistics associated with said interferer.

7. The method of claim 6, wherein:

said statistics associated with said interferer are known.

8. The method of claim 6, wherein:

determining prior probabilities includes assuming statistics for said interferer for use in determining said probabilities.

9. The method of claim 8, wherein:

assuming statistics includes assuming that said interferer is uniformly distributed within a Voronoi cell of a lattice.

10. The method of claim 9, wherein:

assuming statistics includes assuming that said Voronoi cell is a ball.

11. The method of claim 1, wherein performing iterative decoding includes:

performing a first decoding iteration, using said prior probabilities, to generate first information; and

performing a second decoding iteration, using said first information, to generate second information.

12. The method of claim 1, wherein:

performing iterative decoding includes exchanging information between a plurality of constituent decoders.

13. The method of claim 12, wherein:

exchanging information between a plurality of constituent decoders includes exchanging extrinsic information.

14. A decoding system comprising:

a prior probability generator to generate prior probabilities associated with an encoded input signal;

an iterative decoding unit to determine a codeword associated with said encoded input signal by iterative decoding using said prior probabilities, said codeword being within a base cell of an underlying lattice; and

a translation determination unit to determine a cell translation associated with said encoded input signal based on said codeword.

15. The decoding system of claim 14, further comprising:

a cell mapping unit to map said codeword to an appropriate cell of said underlying lattice using said cell translation.

16. The decoding system of claim 14, wherein:

said encoded input signal is coded with a multilevel coset code.

17. The decoding system of claim 14, wherein:

said encoded input signal is coded with a lattice code.

18. The decoding system of claim 14, wherein:

said iterative decoding unit includes multiple constituent decoders to decode constituent codes of said encoded input signal.

19. The decoding system of claim 18, wherein:

said constituent decoders exchange soft information between one another during said iterative decoding.

20. The decoding system of claim 18, wherein:

said iterative decoding unit includes at least one constituent decoder that is an iterative decoder.

21. The decoding system of claim 18, wherein:

said iterative decoding unit includes at least one constituent decoder that is a soft in, soft out (SISO) decoder.

22. The decoding system of claim 14, wherein:

said prior probability generator generates said prior probabilities based on known statistics associated with an interferer.

23. The decoding system of claim 14, wherein:

said prior probability generator assumes statistics for an interferer and generates said prior probabilities based on said assumed statistics.

24. The decoding system of claim 23, wherein:

said prior probability generator assumes that said interferer is uniformly distributed within a Voronoi cell of a lattice.

25. The decoding system of claim 24, wherein:

said prior probability generator assumes that said Voronoi cell is a ball.

26. The decoding system of claim 23, wherein:

said prior probability generator assumes that said interferer has a Gaussian distribution with zero mean and unknown variance.

27. An article comprising machine-accessible media having associated data, wherein the data, when accessed, results in a machine that performs a method for decoding a signal, said method comprising:

determining prior probabilities associated with an encoded input signal;

performing iterative decoding on said encoded input signal, using said prior probabilities, to estimate a codeword associated with said encoded input signal, said codeword being within a base cell of an underlying lattice; and

determining a cell translation associated with said encoded input signal based on said codeword.

28. The article of claim 27, wherein said method further comprises:

mapping said codeword to an appropriate cell of said underlying lattice using said cell translation.

29. The article of claim 27, wherein:

said encoded input signal is coded with a multilevel coset code.

30. The article of claim 27, wherein:

said encoded input signal is coded with a lattice code.

31. The article of claim 27, wherein:

performing iterative decoding includes exchanging information between a plurality of constituent decoders.

32. The article of claim 31, wherein:

exchanging information includes exchanging extrinsic information between a plurality of constituent decoders.